Journal of Radioanalytical and Nuclear Chemistry, Articles, Vol. 179, No. 2 (1994) 385–388

Index to Volume 179

No. 1

Professor Robert E. Jervis 5

Nuclear Analytical Techniques

J. J. M. de Goeij, P. Bode (Delft, The Netherlands)
How to make nuclear methods the choice of a new generation of scientists? 7

F. Grass, H. Holzner, A. Ritschel, S. S. Ismail, J. Dorner (Wien, Austria)
Short-time activation analysis with and without a ^{6}LiD converter 13

V. L. Spate, J. S. Morris, C. K. Baskett, M. M. Mason, C. L. Reams, D. Hunter, W. C. Willett (Columbia, Missouri, USA)
Determination of fluoride in human nails via cyclic instrumental neutron activation analysis 27

N. N. Papadopoulos, N. F. Tsagas (Athens and Xanthi, Greece)
Rapid nondestructive isotopic uranium analysis by neutron activation delayed neutron counting 35

G. P. Westphal (Vienna, Austria)
Refining a high rate gamma spectrometry system 45

G. P. Westphal (Vienna, Austria)
Correction of counting losses of the preloaded filter pulse processor 55

R. Zeisler, R. Demiralp, M. Makarewicz (Vienna, Austria and Gaithersburg, MD, USA)
High count rate gamma spectrometry. A summary of recent experiments in high accuracy NAA applications 61

S. Landsberger (Urbana, Illinois, USA)
Compton suppression neutron activation methods in environmental analysis 67

K. S. Park, N. B. Kim, H. J. Woo, K. Y. Lee, Y. Y. Yoon, W. Hong (Daejeon, Korea)
Determination of impurities in niobium metal by a radiochemical activation analysis 81

Quality Assurance

K. Heydorn, E. Damsgaard (Roskilde, Denmark)
Utilization of k_o-factors for quality assurance in neutron activation analysis 87

F. De Corte, F. Bellemans, P. De Neve, A. Simonits (Gent, Belgium, and Budapest, Hungary)
The use of a modified Westcott-formalism in the k_o-standardization of NAA: The state of affairs 93

S. O. Yusuf, R. F. Fleming (Ann Arbor, Michigan, USA)
Direct measurement of k_o for monitor neutron activation analysis 105

H. Petri, G. Erdmann (Jülich, Germany)
NAA with gamma-line related (k_o) and isotope related (k_i) analytical factors 113

Elsevier Science S. A., Lausanne
Akadémiai Kiadó, Budapest

Tian Weizhi, Ni Bangfa (Beijing, P. R. China)
Further study on parametric standardization in reactor NAA 119

R. R. Greenberg (Gaithersburg, MD, USA)
Accuracy in standards preparation for neutron activation analysis 131

P. Bode, J. P. J. Van Dalen (Delft, The Netherlands)
Accreditation: A forthcoming prerequisite, also for neutron activation analysis laboratories?! 141

Reference Materials

D. A. Becker, D. L. Anderson, R. M. Lindstrom, R. R. Greenberg, K. M. Garrity, E. A. Mackey (Gaithersburg, MD, USA)
Use of INAA, PGAA, and RNAA to determine 30 elements for certification of an SRM: Tomato Leaves, 1573a 149

D. Wu, S. Landsberger (Urbana, IL, USA)
Comparison of NAA methods to determine medium-lived radionuclides in NIST soil standard reference materials 155

M. A. Gouveia, M. I. Prudêncio, J. S. Barros, I. Morgado, J. M. P. Cabral (Sacavém and Lisboa, Portugal)
Elemental concentration data for USGS Geochemical Exploration Reference Materials GXR-1 to GXR-4 and GXR-6 165

G. Solano, S. A. Katz, J. Holzbecher, A. Chatt (Camden, NJ, USA and Halifax, N. S., Canada)
An attempt to prepare and characterize a soil reference material for Cr(VI) and Cr(III) 173

A. C. Beach, N. M. Spyrou (Guildford, Surrey, UK)
Combined photon transmission tomography and PIXE analysis for representative sampling and testing matrix homogeneity 177

No. 2

Nuclear Analytical Methods in Atmospheric Pollution Studies

E. A. Oluyemi, O. I. Asubiojo, A. F. Oluwole, C. J. N. Toussaint (Ile-Ife, Nigeria and Ispra, Italy)
Elemental concentrations and source identification of air particulate matter at a Nigerian site: A preliminary study 187

J. A. Adejumo, I. B. Obioh, O. J. Ogunsola, F. A. Akeredolu, H. B. Olaniyi, O. I. Asubiojo, A. F. Oluwole, O. A. Akanle, N. M. Spyrou (Ile-Ife, Nigeria and Guildford, Surrey, UK)
The atmospheric deposition of major, minor and trace elements within and around three cement factories 195

M. Polasek, R. E. Jervis (Toronto, Canada)
Elements in car and truck tires and their volatilization upon incineration 205

Nuclear Analytical Methods in Hydrospheric Pollution Studies

J. T. van Elteren, H. A. Das, C. L. De Ligny, J. Agterdenbos, D. Bax (Petten and Utrecht, The Netherlands)
Arsenic speciation in aqueous samples using a selective As(III)/As(V) preconcentration in combination with an automatable cryotrapping hydride generation procedure for monomethylarsonic acid and dimethylarsinic acid 211

S. J. Yeh, J. C. Wei, C. N. Ke, C. Y. Yang (Hsinchu, Taiwan, R. O. C.)
Determination of trace elements in surface water by neutron activation analysis 221

A. P. Grimanis, Maria Vassilaki-Grimani, N. Kalogeropoulos (Attiki, Greece)
Pollution studies of silver and antimony in Saronikos Gulf, Greece by INAA 231

G. Bidoglio, T. G. Cole, M. Soupioni, M. Garcia Gutierrez, A. Yllera De Llano (Ispra, Italy, Patras, Greece and Madrid, Spain)
Advective and diffusive transport of trace metals in soil-water systems as studied by radiotracer methodologies 243

E. A. N. Fernandes, E. S. B. Ferraz, H. Oliveira (Piracicaba, Brazil)
Trace elements distribution in the Amazon floodplain soils 251

R. C. Orlando, E. A. N. Fernandes, M. Szikszay (Piracicaba and São Paulo, Brazil)
Trace elements in a profile of the unsaturated zone of the São Paulo Basin 259

P. I. Beazley, R. R. Rao, A. Chatt (Halifax, N. S., Canada)
Preconcentration neutron activation analysis of trace elements in surface waters by coprecipitation with pyrrolidinedithiocarbamate in the presence of Bi(III) 267

A. M. Yusof, Z. B. Ikhsan, A. K. H Wood (Johor Bahru and Bangi, Malaysia)
The speciation of arsenic in seawater and marine species 277

Nuclear Analytical Methods in Biology and Medicine

N. M. Spyrou (Guildford, Surrey, UK)
Tomography and elemental analysis using neutrons in transmission 285

V. Y. Zaichick (Obninsk, Russia)
Instrumental activation and X-ray fluorescent analysis of human bone in health and disease 295

L. Robinson, F. F. Dyer, D. W. Combs, J. W. Wade, N. A. Teasley, J. E. Carlton, A. L. Ondracek, J. R. Stokely (Oak Ridge, TN and West Lafayette, IN, USA)
Determination of Hg and other trace elements in soil using neutron activation analysis 305

V. L. Spate, M. M. Mason, C. L. Reams, C. K. Baskett, J. S. Morris, D. S. Mills (Columbia, MO, USA)
Determination of total and bound Se in sera by INAA 315

C. K. Baskett, V. L. Spate, M. M. Mason, C. L. Reams, J. S. Morris (Columbia, MO, USA)
The determination of selenium in urine 323

L. Tandon, B.-F. Ni, X. X. Ding, W. D. Ehmann, E. J. Kasarskis, W. R. Markesbery (Lexington, KY, USA)
RNAA for arsenic, cadmium, copper, and molybdenum in CNS tissues from subjects with age-related neurodegenerative diseases 331

H. Robotham, M. Wong, C. Thompson, M. Golden (Kingston, Jamaica)
The identification of geophagia by neutron activation analysis 341

W. Arshed, O . A. Akanle, N. M. Spyrou (Guildford, Surrey, UK)
The distribution of fluorine and other elements in teeth using proton induced reaction analysis techniques 349

A. Al-Hashimi (Toronto, Ontario, Canada)
Trace elements in the hair of new-born infants by INAA 357

V. P. Guinn, M. Gavrilas-Guinn, R. Demiralp (College Park and Gaithersburg, Maryland, USA)
Measurement of arsenic in sectioned hair samples by instrumental neutron activation analysis 365

M. B. A. Vasconcellos, M. Saiki, G. Paletti, R. M. M. Pinheiro, R. G. Baruzzi, R. Spindel (São Paulo, Brasil)
Determination of mercury in head hair of Brazilian populational groups by neutron activation analysis 369

Jingxin Sun, Hang Zhao, Yuqi Wang (Beijing, China)
Study on the contents of trace rare earth elements and their distribution in wheat and rice samples by RNAA 377

Index to Volume 179 385

Journal of Radioanalytical and Nuclear Chemistry, Articles, Vol. 179, No. 2 (1994) 389–392

Author Index to Volume 179

ADEJUMO, J. A., OBIOH, I. B., OGUNSOLA, O. J., AKEREDOLU, F. A., OLANIYI, H. B., ASUBIOJO, O. I., OLUWOLE, A. F., AKANLE, O. A., SPYROU, N. M.: The atmospheric deposition of major, minor and trace elements within and around three cement factories, 195

AGTERDENDOS, J., *see* ELTEREN, VAN, J. T., 211

AKANLE, O. A., *see* ADEJUMO, J. A., 195

AKANLE, O. A., *see* ARSHED, W., 349

AKEREDOLU, F. A., *see* ADEJUMO, J. A., 195

AL-HASHIMI, A.: Trace elements in the hair of new-born infants by INAA, 357

ANDERSON, D. L., *see* BECKER, D. A., 149

ARSHED, W., AKANLE, O. A., SPYROU, N. M.: The distribution of fluorine and other elements in teeth using proton induced reaction analysis technique, 349

ASUBIOJO, O. I., *see* ADEJUMO, J. A., 195

ASUBIOJO, O. I., *see* OLUYEMI, E. A., 187

BARROS, J. S., *see* GOUVEIA, M. A., 165

BARUZZI, R. G., *see* VASCONCELLOS, M. B. A., 369

BASKETT, C. K., SPATE, V. L., MASON, M. M., REAMS, C. L., MORRIS, J. S.: The determination of selenium in urine, 323

BASKETT, C. K., *see* SPATE, V. L., 27, 315

BAX, D., *see* ELTEREN, VAN, J. T., 211

BEACH, A. C., SPYROU, N. M.: Combined photon transmission tomography and PIXE analysis for representative sampling and testing matrix homogeneity, 177

BEAZLEY, P. I., RAO, R. R., CHATT, A.: Preconcentration neutron activation analysis of trace elements in surface waters by coprecipitation with pyrrolidinedithiocarbamate in the presence of Bi(III), 267

BECKER, D. A., ANDERSON, D. L., LINDSTROM, R. M., GREENBERG, R. R., GARRITY, K. M., MACKEY, E. A.: Use of INAA, PGAA, and RNAA to determine 30 elements for certification of an SRM: Tomato Leaves, 1573a, 149

BELLEMANS, F., *see* DE CORTE, F., 93

BIDOGLIO, G., COLE, T. G., SOUPIONI, M.; GARCIA, GUTIERREZ, M.; YLLERA, DE LLANO, A.: Advective and diffusive transport of trace metals in soil-water systems as studied by radiotracer methodologies, 243

BODE, P., VAN DALEN, J. P. J.: Accreditation: A forthcoming prerequisite, also for neutron activation analysis laboratories?!, 141

BODE, P., *see* GOEIJ, DE, J. J. M., 7

CABRAL, J. M. P., *see* GOUVEIA, M. A., 165

CARLTON, J. E., *see* ROBINSON, L., 305

CHATT, A., *see* BEAZLEY, P. I., 267

CHATT, A., *see* SOLANDO, G., 173

COLE, T. G., *see* BIDOGLIO, G., 243

COMBS, D. W., *see* ROBINSON, L., 305

CORTE, DE, F., *see* DE CORTE, F., 93

DALEN, VAN, J. P. J., *see* VAN DALEN, J. P. J., 141

DAMSGAARD, E., *see* HEYDORN, K., 87

DAS, H. A., *see* ELTEREN, VAN, J. T., 211

DE CORTE, F., BELLEMANS, F., DE NEVE, P., SIMONITS, A.: The use of a modified Westcott-formalism in the k_0-standardization of NAA: The state of affairs, 93

DE GOEIJ, J. J. M., *see* GOEIJ, DE, J. J. M., 7

DE LIGNY, C. L., *see* ELTEREN, VAN, J. T., 211

Elsevier Science S. A., Lausanne
Akadémiai Kiadó, Budapest

DE LLANO, YLLERA, A., *see* YLLERA, DE LLANO, A., 243

DEMIRALP, R., *see* GUINN, V. P., 365

DEMIRALP, R., *see* ZEISLER, R., 61

DE NEVE, P., *see* DE CORTE, F., 93

DING, X. X., *see* TANDON, L., 331

DORNER, J., *see* GRASS, F., 13

DYER, F. F., *see* ROBINSON, L., 305

EHMANN, W. D., *see* TANDON, L., 331

ELTEREN, VAN, J. T., DAS, H. A., DE LIGNY, C. L., AGTERDENBOS, J., BAX, D.: Arsenic speciation in aqueous samples using a selective As(III)/As(V) preconcentration in combination with an automatable cryotrapping hydride generation procedure for monomethylarsonic acid and dimethylarsinic acid, 211

ERDMANN, G., *see* PETRI, H., 113

FERNANDES, E. A N., FERRAZ, E. S. B., OLIVEIRA, H.: Trace elements distribution in the Amazon floodplain soils, 251

FERNANDES, E. A. N., *see* ORLANDO, R. C., 259

FERRAZ, E. S. B., *see* FERNANDES, E. A. N., 251

FLEMING, R. F., *see* YUSUF, S. O., 105

GARCIA, GUTIERREZ, M., *see* BIDOGLIO, G., 243

GARRITY, K. M., *see* BECKER, D. A., 149

GAVRILAS-GUINN, M., *see* GUINN, V. P., 365

GOEIJ, DE, J. J. M., BODE, P.: How to make nuclear methods the choice of a new generation of scientists?, 7

GOLDEN, M., *see* ROBOTHAM, H., 341

GOUVEIA, M. A., PRUDÊNCIO, M. I., BARROS, J. S., MORGADO, I., CABRAL, J. M. P.: Elemental concentration data for USGS Geochemical Exploration Reference Materials GXR-1 to GXR-4 and GXR-6, 165

GRASS, F., HOLZNER, H., RITSCHEL, A., ISMAIL, S. S., DORNER, J.: Short-time activation analysis with and without a ^{6}LiD converter, 13

GREENBERG, R. R.: Accuracy in standards preparation for neutron activation analysis, 131

GREENBERG, R. R., *see* BECKER, D. A., 149

GRIMANIS, A. P.; VASSILAKI-GRIMANI, MARIA; KALOGEROPOULOS, N.: Pollution studies of silver and antimony in Saronikos Gulf, Greece by INAA, 231

GUINN, V. P., GAVRILAS-GUINN, M., DEMIRALP, R.: Measurement of arsenic in sectioned hair samples by instrumental neutron activation analysis, 365

GUTIERREZ, GARCIA, M., *see* GARCIA, GUITERREZ, M., 243

HEYDORN, K., DAMSGAARD, E.: Utilization of k_o-factors for quality assurance in neutron activation analysis, 87

HOLZBECHER, J., *see* SOLANO, G., 173

HOLZNER, H., *see* GRASS, F., 13

HONG, W., *see* PARK, K. S., 81

HUNTER, D., *see* SPATE, V. L., 27

IKHSAN, Z. B., *see* YUSOF, A. M., 277

ISMAIL, S. S., *see* GRASS, F., 13

JERVIS, R. E., *see* POLASEK, M., 205

KALOGEROPOULOS, N., *see* GRIMANIS, A. P., 231

KASARSKIS, E. J., *see* TANDON, L., 331

KATZ, S. A., *see* SOLANO, G., 173

KE, C. N., *see* YEH, S. J., 221

KIM, N. B., *see* PARK, K. S., 81

LANDSBERGER, S.: Compton suppression neutron activation methods in environmental analysis, 67

LANDSBERGER, S., *see* WU, D., 155

LEE, K. Y., *see* PARK, K. S., 81

LIGNY, DE, C. L., *see* DE LIGNY, C. L., 211

LINDSTROM, R. M., *see* BECKER, D. A., 149

MACKEY, E. A., *see* BECKER, D. A., 149

MAKAREWICZ, M., *see* ZEISLER, R., 61

MARKESBERY, W. R., *see* TANDON, L., 331

MASON, M. M., *see* BASKETT, C. K., 323

MASON, M. M., *see* SPATE, V. L., 27, 315

MILLS, D. S., *see* SPATE, V. L., 315

MORGADO, I., *see* GOUVEIA, M. A., 165

MORRIS, J. S., *see* BASKETT, C. K., 323

MORRIS, J. S., *see* SPATE, V. L., 27, 315

NEVE, DE, P., *see* DE NEVE, P., 93

NI, B.-F., *see* TANDON, L., 331

NI, BANGFA, *see* TIAN, WEIZHI, 119

OBIOH, I. B., *see* ADEJUMO, J. A., 195

OGUNSOLA, O. J., *see* ADEJUMO, J. A., 195

OLANIYI, H. B., *see* ADEJUMO, J. A., 195

OLIVEIRA, H., *see* FERNANDES, E. A. N., 251

OLUWOLE, A. F., *see* ADEJUMO, J. A., 195

OLUWOLE, A. F., *see* OLUYEMI, E. A., 187

OLUYEMI, E. A., ASUBIOJO, O. I., OLUWOLE, A. F., TOUSSAINT, C. J. N.: Elemental concentrations and source identification of air particulate matter at a Nigerian site: A preliminary study, 187

ONDRACEK, A. L., *see* ROBINSON, L., 305

ORLANDO, R. C., FERNANDES, E. A. N., SZIKSZAY, M.: Trace elements in a profile of the unsaturated zone of the São Paulo Basin, 259

PALETTI, G., *see* VASCONCELLOS, M. B. A., 369

PAPADOPOULOS, N. N., TSAGAS, N. F.: Rapid nondestructive isotopic uranium analysis by neutron activation delayed neutron counting, 35

PARK, K. S., KIM, N. B., WOO, H. J., LEE, K. Y., YOON, Y. Y., HONG, W.: Determination of impurities in niobium metal by a radiochemical activation analysis, 81

PETRI, H., ERDMANN, G.: NAA with gamma-line related (k_γ) and isotope related (k_i) analytical factors, 113

PINHEIRO, R. M. M., *see* VASCONCELLOS, M. B. A., 369

POLASEK, M., JERVIS, R. E.: Elements in car and truck tires and their volatilization upon incineration, 205

PRUDÊNCIO, M. I., *see* GOUVEIA, M. A., 165

RAO, R. R., *see* BEAZLEY, P. I., 267

REAMS, C. L., *see* BASKETT, C. K., 323

REAMS, C. L., *see* SPATE, V. L., 27, 315

RITSCHEL, A., *see* GRASS, F., 13

ROBINSON, L., DYER, F. F., COMBS, D. W., WADE, J. W., TEASLEY, N. A., CARLTON, J. E., ONDRACEK, A. L., STOKELY, J. R.: Determination of Hg and other trace elements in soil using neutron activation analysis, 305

ROBOTHAM, H., WONG, M., THOMPSON, C., GOLDEN, M.: The identification of geophagia by neutron activation analysis, 341

SAIKI, M., *see* VASCONCELLOS, M. B. A., 369

SIMONITS, A., *see* DE CORTE, F., 93

SOLANO, G., KATZ, S. A., HOLZBECHER, J., CHATT, A.: An attempt to prepare and characterize a soil reference material for Cr(VI) and Cr(III), 173

SOUPIONI, M., *see* BIDOGLIO, G., 243

SPATE, V. L., MASON, M. M., REAMS, C. L., BASKETT, C. K., MORRIS, J. S., MILLS, D. S.: Determination of total and bound Se in sera by INAA, 315

SPATE, V. L., MORRIS, J. S., BASKETT, C. K., MASON, M. M., REAMS, C. L., HUNTER, D., WILLETT, W. C.: Determination of fluoride in human nails via cyclic instrumental neutron activation analysis, 27

SPATE, V. L., *see* BASKETT, C. K., 323

SPINDEL, R., *see* VASCONCELLOS, M. B. A., 369

SPYROU, N. M.: Tomography and elemental analysis using neutrons in transmission, 285

SPYROU, N. M., *see* ADEJUMO, J. A., 195

SPYROU, N. M., *see* ARSHED, W., 349

SPYROU, N. M., *see* BEACH, A. C., 177

STOKELY, J. R., *see* ROBINSON, L., 305

SUN, JINGXIN; ZHAO, HANG; WANG, YUQI: Study on the contents of trace rare earth elements and their distribution in wheat and rice samples by RNAA, 377

SZIKSZAY, M., *see* ORLANDO, R. C., 259

TANDON, L., NI, B.-F., DING, X. X., EHMANN, W. D., KASARSKIS, E. J., MARKESBERY, W. R.: RNAA for arsenic, cadmium, copper, and molybdenum in CNS tissues from subjects with age-related neurodegenerative diseases, 331

TEASLEY, N. A., *see* ROBINSON, L., 305

THOMPSON, C., *see* ROBOTHAM, H., 341

TIAN, WEIZHI; NI, BANGFA: Further study on parametric standardization in reactor NAA, 119

TOUSSAINT, C. J. N., *see* OLUYEMI, E. A., 187

TSAGAS, N. F., *see* PAPADOPOULOS, N. N., 35

VAN DALEN, J. P. J., *see* BODE, P., 141

VAN ELTEREN, J. T., *see* ELTEREN, VAN, J. T., 211

VASCONCELLOS, M. B. A., SAIKI, M., PALETTI, G., PINHEIRO, R. M. M., BARUZZI, R. G., SPINDEL, R.: Determination of mercury in head hair of Brazilian populational groups by neutron activation analysis, 369

VASSILIAKI-GRIMANI, MARIA, *see* GRIMANIS, A. P., 231

WADE, J. W., *see* ROBINSON, L., 305

WANG, YUQI, *see* SUN, JINGXIN, 377

WEI, J. C., *see* YEH, S. J., 221

WESTPHAL, G. P.: Correction of the counting losses of the preloaded filter pulse processor, 55

WESTPHAL, G. P.: Refining a high rate gamma spectrometry system, 45

WILLETT, W. C., *see* SPATE, V. L., 27

WONG, M., *see* ROBOTHAM, H., 341

WOO, H. J., *see* PARK, K. S., 81

WOOD, A. K. H., *see* YUSOF, A. M., 277

WU, D., LANDSBERGER, S.: Comparison of NAA methods to determine medium-lived radionuclides in NIST soil standard reference materials, 155

YANG, C. Y., *see* YEH, S. J., 221

YEH, S. J., WEI, J. C., KE, C. N., YANG, C. Y.: Determination of trace elements in surface water by neutron activation analysis, 221

YLLERA, DE LLANO, A., *see* BIDOGLIO, G., 243

YOON, Y. Y., *see* PARK, K. S., 81

YUSOF, A. M., IKHSAN, Z. B., WOOD, A. K. H.: The speciation of arsenic in seawater and marine species, 277

YUSUF, S. O., FLEMING, R. F.: Direct measurement of k_o for monitor neutron activation, 105

ZAICHICK, V. Y.: Instrumental activation and X-ray fluorescent analysis of human bone in health and disease, 295

ZEISLER, R., DEMIRALP, R., MAKAREWICZ, M.: High count rate gamma spectrometry. A summary of recent experiments in high accuracy NAA applications, 61

ZHAO, HANG, *see* SUN, JINGXIN, 377